Cont A1

syringyl functional groups or both[, and the] with said biomass hydrolyzate for a time sufficient to form an adsorption complex and a dissolved sugar fraction;

(d) removing the adsorption complex [wherein a dissolved sugar fraction is provided]; and

(e) converting the dissolved sugar fraction into a fuel or chemical using a microorganism.

A2

3. (Amended) The process of claim 1 wherein the [adsorbed] adsorption complex comprises a compound consisting essentially of lignin-derived phenol compounds.

A3

5. (Amended) The process of claim 1 further comprising, after adjusting pH, heating the biomass hydrolyzate to a temperature in the range of 80^0C to 100^0C.

6. (Amended) The process of claim 1 wherein [the] said microorganism[s are] is selected from the group consisting of *r. Zymomonas mobilis, Saccharomyces cerevisae* D_5A, or *Lactobacillus rhamnosus*.

7. (Amended) The process of claim 3 wherein the metal oxide [comprises] is titanium dioxide, [the] and said titanium dioxide [concentration being] is twice [a] said phenol [concentration] compounds of the biomass hydrolyzate.

8. (Amended) The process of claim 3 wherein [the] said biomass hydrolyzate is a softwood and [the] said metal oxide concentration is four times a phenol compounds content of [the] said biomass hydrolyzate.

9. (Amended) The process of claim 1 [4] wherein the dissolved sugar fraction includes less than one mg/mL of lignin-derived compounds.

10. (Amended) A fermentable medium comprising [the] an undiluted sugar fraction of claim 1.

CORRECTED VERSION OF THE CLAIMS

1. (Amended) A process of making a fuel or chemical from a biomass hydrolyzate comprising:

(a) providing a biomass hydrolyzate;

(b) Adjusting pH of said biomass hydrolyzate within a range of 6 - 10;

(c) contacting a metal oxide selected from the group consisting of titanium dioxide, vanadium oxide, and zirionium oxide having an affinity for guaiacyl or syringyl functional groups or both with said biomass hydrolyzate for a time sufficient to form an adsorption complex and a dissolved sugar fraction;

(d) removing the adsorption complex; and

(e) converting the dissolved sugar fraction into a fuel or chemical using a microorganism.

3. (Amended) The process of claim 1 wherein the adsorption complex comprises a compound consisting essentially of lignin-derived phenol compounds.

5. (Amended) The process of claim 1 further comprising, after adjusting pH, heating the biomass hydrolyzate to a temperature in the range of 80^0C to 100^0C.

6. (Amended) The process of claim 1 wherein said microorganism is selected from the group consisting of *r. Zymomonas mobilis, Saccharomyces cerevisae* D_5A, or *Lactobacillus rhamnosus*.

7. (Amended) The process of claim 3 wherein the metal oxide is titanium dioxide, and said titanium dioxide is twice said phenol compounds of the biomass hydrolyzate.

8. (Amended) The process of claim 3 wherein said biomass hydrolyzate is a softwood and

said metal oxide concentration is four times a phenol compounds content of said biomass hydrolyzate.

9. (Amended) The process of claim 1 wherein the dissolved sugar fraction includes less than one mg/mL of lignin-derived compounds.

10. (Amended) A fermentable medium comprising an undiluted sugar fraction of claim 1.